This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A telemetry system, comprising;

a lead set comprising a plurality of electrocardiograph (ECG) leads connected to a lead set connector, the lead set providing an antenna formed from conductive material within at least one of the plurality ECG leads; and

a telemetry unit which connects to the lead set and uses the antenna to transmit physiologic data sensed using the lead set, the telemetry unit including a dynamic impedance matching circuit coupled to the antenna and an impedance detector that monitors an impedance of the antenna, ~~and further including a dynamic impedance matching circuit coupled to the antenna,~~ the dynamic impedance matching circuit being responsive to a control signal generated by the impedance detector based on impedance changes detected by the impedance detector to compensate for said impedance changes.

2. (Original) The telemetry system as in Claim 1, wherein the antenna comprises a conductor that extends in non-coaxial relationship alongside an ECG conductor within an ECG lead.

3. (Original) The telemetry system as in Claim 1, wherein the antenna comprises a coaxial shield portion of at least one of the ECG leads.

4. (Original) The telemetry system as in Claim 1, wherein the antenna is a single-lead antenna formed from a single lead of the plurality of ECG leads.

5. (Original) The telemetry system as in Claim 1, wherein the antenna is one of multiple antennas of the lead set, and the telemetry unit selects between the multiple antennas to provide antenna diversity.

6. (Original) The telemetry system as in Claim 5, wherein the telemetry unit selects between the multiple antennas based at least in part upon an output of the impedance detector.

7. (Original) The telemetry system as in Claim 1, wherein each ECG lead of the lead set comprises a respective antenna conductor that is separately connected to a switch within the telemetry unit, the switch being capable of interconnecting two or more of the antenna conductors to dynamically form an antenna, and wherein the impedance detector separately monitors impedances of each of the antenna conductors.

8. (Original) The telemetry system as in Claim 1, wherein the telemetry unit is am ambulatory telemetry unit.

9. (Original) The telemetry system as in Claim 1, wherein the telemetry unit is a unidirectional transmitter unit.

10. (Original) The telemetry system as in Claim 1, wherein the telemetry unit is a transceiver unit.

11. (Original) The telemetry system as in Claim 1, wherein the dynamic impedance matching circuit is controlled by a microcontroller coupled to the impedance detector.

12. (Currently Amended) A telemetry system, comprising:

a lead set comprising a plurality of leads that attach to a patient to monitor physiologic data of the patient, the lead set providing an antenna formed from conductive material within at least one of the plurality ECG leads; and

a telemetry unit which receives the physiologic data from the lead set and transmits the physiologic data from the antenna, the telemetry unit including ~~a circuit~~ an impedance detector that monitors an impedance of the antenna, and ~~adjusts~~ generates a control signal to a dynamic impedance matching circuit coupled to the antenna ~~to~~ such that the dynamic impedance matching circuit corrects for impedance mismatches.

13. (Original) The telemetry system as in Claim 12, wherein the lead set is an electrocardiograph (ECG) lead set.

14. (Original) The telemetry system as in Claim 12, wherein the lead set is an electroencephalogram (EEG) lead set.

15. (Original) The telemetry system as in Claim 12, wherein the lead set comprises at least one of the SpO_2 sensor and an oscillometric blood pressure sensor.

16. (Original) The telemetry system as in Claim 12, wherein the antenna comprises a conductor that extends in non-coaxial relationship alongside a physiologic data sensing conductor within a lead of the leadset.

17. (Original) The telemetry system as in Claim 12, wherein the antenna comprises an outer shield portion of at least one of the leads.

18. (Original) The telemetry system as in Claim 12, wherein the antenna is a single-lead antenna formed from a single lead of the plurality leads.

19. (Original) The telemetry system as in Claim 12, wherein the antenna is one of multiple antennas of the lead set, and the telemetry unit selects the multiple antennas to provide antenna diversity.

20. (Previously Presented) The telemetry system as in Claim 19, wherein the telemetry unit selects between the multiple antennas based at least in part upon an output of an impedance detector.

21. (Original) The telemetry system as in Claim 12, wherein each lead of the lead set comprises a respective antenna conductor that is separately connected to a switch within the telemetry unit, the switch being capable of interconnecting two or more of the antenna conductors to dynamically form an antenna, and wherein the impedance detector separately monitors impedances of each of the antenna conductors.

22. (Original) The telemetry system as in Claim 12, wherein the telemetry unit is am ambulatory telemetry unit.

23. (Original) The telemetry system as in Claim 12, wherein the telemetry unit is a unidirectional transmitter unit.

24. (Original) The telemetry system as in Claim 12, wherein the telemetry unit is transceiver unit.

25. (Original) The telemetry system as in claim 12, wherein the circuit comprises a microcontroller that controls the dynamic impedance matching circuit.

26. (Original) The telemetry system as in Claim 12, wherein the lead set is detachable from the telemetry unit.

27. (Currently Amended) A method of conveying physiologic data of a patient to a remote location for monitoring, comprising:

sensing physiologic data of the patient with a lead set that attaches to the patient;

transmitting the physiologic data from an antenna which comprises at least one conductor that extents within a lead of the lead set; ~~and~~

detecting the impedance of the antenna and generating a control signal based on the detected impedance; and

automatically adjusting a dynamic impedance matching circuit coupled to the antenna to compensate for changes in an impedance of the antenna.

28. (Original) The method as in Claim 27, wherein sensing physiologic data comprises sensing ECG waveform data.

29. (Original) The method as in Claim 27, wherein sensing physiologic data comprises sensing EEG data.

30. (Original) The method as in Claim 27, wherein the lead set comprises multiple antennas, and the method further comprises switching between the multiple antennas to provide antenna diversity.